

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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STANDARD FOR QUICK FROZEN PEAS

CXS 41-1981

Adopted in 1981. Amended in 2019.

1. SCOPE

This standard shall apply to quick frozen peas of the species *Pisum sativum* L. as defined below and offered for direct consumption without further processing, except for size grading or repacking if required. It does not apply to the product when indicated as intended for further processing, or for other industrial purposes.

2. DESCRIPTION

2.1 Product Definition

Quick frozen peas are the product prepared from fresh, clean, sound, whole, immature seeds of peas which have been washed, sufficiently blanched to ensure adequate stability of colour and flavour during normal marketing cycles and which conform to the characteristics of the species *Pisum sativum* L.

2.2 Process Definition

Quick frozen peas is the product subject to a freezing process in appropriate equipment and complying with the conditions laid down hereafter. This freezing operation shall be carried out in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature has reached -18°C (0°F) at the thermal centre after thermal stabilization. The recognized practice of repacking quick frozen products under controlled conditions is permitted.

2.3 Handling Practice

The product shall be handled under such conditions as will maintain the quality during transportation, storage and distribution up to and including the time of final sale. It is recommended that during storage, transportation, distribution and retail, the product be handled in accordance with the provisions of the *Code of Practice for the Processing and Handling of Quick Frozen Foods* (CXC 8-1976).

2.4 Presentation

2.4.1 Types

2.4.1.1 Any suitable variety of pea may be used.

2.4.1.2 The product shall be presented as "peas" or may be presented as "garden peas" provided they meet the organoleptic and analytical characteristics of the type, e.g. "Kelvedon Wonder", "Dark Skin Perfection" and others.

2.4.2 Sizing

2.4.2.1 Quick frozen peas of either type may be presented sized or unsized.

2.4.2.2 If peas are size graded they shall conform to one of the two following systems of specifications for the size names:

Specifications A for Sizing

Size designation	Round hole sieve size in mm
Small	up to 8.75
Medium	up to 10.2
Large	over 10.2

Specifications B for Sizing

Size designation	Round hole sieve size in mm
Extra small	up to 7.5
Very small	up to 8.2
Small	up to 8.75
Medium	up to 10.2
Large	over 10.2

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Optional Ingredients

3.1.1 Sugars (sucrose, invert sugar, dextrose, fructose, glucose syrup, dried glucose syrup);

3.1.2 Salt;

3.1.3 Condiments, such as spices and herbs.

3.2 Quality Factors

3.2.1 *Organoleptic and other characteristics*

3.2.1.1 The product shall be of a reasonably uniform green colour according to type, whole, clean, practically free from foreign matter, free from any foreign taste or smell and practically free from damage by insects or diseases.

3.2.1.2 The product shall have a normal flavour, taking into consideration any seasonings or ingredients added.

3.2.2 *Analytical Characteristics*

The alcohol-insoluble solids content as determined by the method specified in relevant Codex texts on methods of analysis and sampling must not exceed:

for Peas	- 23% m/m
for Garden Peas	- 19% m/m

3.3 Definition of Defects

3.3.1 **Blond Peas** means peas which are yellow or white but which are edible (that is, not sour or rotted).

3.3.2 **Blemished Peas** means peas which are slightly stained or spotted.

3.3.3 **Seriously Blemished Peas** means peas which are hard, shrivelled, spotted, discoloured or otherwise blemished to an extent that the appearance or eating quality is seriously affected. These shall include worm-eaten peas.

3.3.4 **Pea fragments** means portions of peas, separated or individual cotyledons, crushed, partial or broken cotyledons and loose skins, but does not include entire intact peas with skins detached.

3.3.5 **Extraneous Vegetable Material (E.V.M.)** means any vine or leaf or pod material from the pea plant, or other vegetable material such as poppyheads or thistles.

3.4 Tolerances for Defects

Based on a sample unit of 500 g the end product shall have not more than the following:

3.4.1	Blond Peas	2% m/m
3.4.2	Blemished Peas	5% m/m
3.4.3	Seriously Blemished Peas	1% m/m
3.4.4	Pea Fragments	12% m/m
3.4.5	E.V.M.	0.5% m/m but not more than 12 cm ² in area

3.5 Tolerances for Sizes

If size graded, the product shall contain not less than 80% either by number or mass of peas of the declared size or of smaller sizes. It shall contain no peas of sizes larger than the next two larger sizes nor more than 20% either by number or mass of peas of the next two larger sizes, if such there be. Not more than one quarter of these peas whether by number or mass, shall belong to the larger of the next two sizes.

3.6 Classification of Defectives

Any sample unit from a sample taken in accordance with an appropriate sampling plan with an AQL 6.5, (see relevant Codex texts on methods of analysis and sampling), shall be regarded as "defective" when any of the defects listed under 3.3 is present in more than twice the amount of the specified tolerance for the individual defect as listed under 3.4 or if the total of 3.4.1 to 3.4.4 inclusive exceeds 15% m/m.

3.7 Lot Acceptance

A lot is considered acceptable when the number of such "defectives" as specified in 3.6 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5. (See relevant Codex texts on methods of analysis and sampling).

4. FOOD ADDITIVES

Maximum Level

Natural flavours and their identical synthetic equivalents except those which are known to represent a toxic hazard.¹

Limited by GMP

5. HYGIENE

- 5.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CXC 1-1969), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to this product.
- 5.2 To the extent possible in Good Manufacturing Practice, the product shall be free from objectionable matter.
- 5.3 When tested by appropriate methods of sampling and examination, the product:
- shall be free from microorganisms in amounts which may represent a hazard to health;
 - shall be free from parasites which may represent a hazard to health; and
 - shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

6. LABELLING

In addition to the requirements of the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985), the following specific provisions apply:

6.1 The Name of the Food

The name of the product shall only include:

- 6.1.1 The designation "peas", except that where peas are presented in conformity with 2.4.1.2 the designation shall be "garden peas" or the equivalent designation used in the country in which the product is intended to be sold. The words "quick frozen" shall also appear on the label, except that the term "frozen"² may be applied in countries where this term is customarily used for describing the product processed in accordance with sub-section 2.2 of the standard.
- 6.1.2 Where a characterizing flavouring or ingredient has been added, this shall be stated as "with x", as appropriate.
- 6.1.3 Where a statement of size is made, either the sieve size or the words "extra small", "very small", "small", "medium" or "large", as appropriate, shall be indicated.

6.2 Additional Requirements

Information for keeping and thawing of the product shall be given on retail packs.

6.3 Bulk Packs

In the case of quick frozen peas in bulk the information required above must either be placed on the container or be given in accompanying documents, except that in the name of the food accompanied by the words "quick frozen" (the term "frozen" may be applied in countries where this term is customarily used for describing the product processed in accordance with sub-section 2.2 of this standard) and the name and address of the manufacturer or packer must appear on the container.

7. PACKAGING

Packaging used for quick frozen peas must protect the organoleptic and quality characteristics of the product: protect the product from bacteriological and other contamination (including contamination from the packaging material itself); protect the product from moisture loss, dehydration and, where appropriate, leakage as far as technologically practicable; and not pass on to the product any odour, taste, colour or other foreign characteristics.

8. METHODS OF ANALYSIS AND SAMPLING

For checking the compliance with this Standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999) relevant to the provisions in this Standard shall be used.

¹ Temporarily endorsed.

² "frozen": This term is used as an alternative to "quick frozen" in some English speaking countries.